

FITCH RATES NC TURNPIKE AUTH'S SERIES 2018 TRIANGLE EXPRESSWAY SYSTEM REV REF BONDS 'BBB-'

Fitch Ratings-New York-08 November 2018: Fitch Ratings has assigned a 'BBB-' rating to the North Carolina Turnpike Authority's (NCTA) Triangle Expressway system senior lien revenue refunding bonds. Fitch has also affirmed the 'BBB-' rating on the expressway's outstanding bonds and the \$430.4 million Transportation Infrastructure Finance and Innovation Act (TIFIA) loan. The Series 2018 Revenue Refunding Bonds will refund the outstanding TIFIA loan.

The Outlooks on both the bonds and the TIFIA loan are Positive.

KEY RATING DRIVERS

The rating reflects the expressway's continued strong ramp-up and the Complete 540 expansion project's commuter-based traffic profile, supported by an expanding service area with strong population and economic growth. The rating is further supported by a commitment from the North Carolina Department of Transportation (NCDOT) to fund operating, maintenance and rehabilitation costs, if toll revenues are insufficient, strengthening the bonds' gross pledge. NCTA benefits from legal rate-making flexibility, but due to limited operating history, price sensitivity to increasing toll rates has not yet been adequately tested. Management has taken steps to reduce a sharply escalating debt service profile, though debt back-loading pressures NCTA's financial flexibility.

The Positive Outlook reflects the Triangle Expressway's robust traffic and revenue growth ahead of expectations, leading to a strong financial position. Future positive rating action by Fitch would be contingent on successful financing of the Complete 540 project while maintaining strong financial metrics and continued ample growth on the existing Triangle Expressway. Complete 540 will be supported by a construction completion guarantee from NCDOT during the construction phase. Under Fitch's rating case scenario, which includes the Complete 540 project and potential debt associated with the project, post ramp-up total coverage averages 1.4x through 2039 (1.6x through the life of the debt), which is in line with the criteria's indicative ranges for the 'BBB' category, with a minimum loan life coverage ratio (LLCR) of 1.7x.

Strong Market, Continued Growth - Revenue Risk (Volume): Midrange

Triangle Expressway and the planned Complete 540 extension will serve as a major alternative to congested toll-free roadways and also as a key route to the main employment center in the region, Research Triangle Park (RTP). Traffic on the existing expressway continues to show strong growth through the ramp-up period. Ample economic activity in the service area should contribute to future traffic growth, with the addition of two parkway interchanges on the existing expressway leading to continued ramp-up until 2023. However, with the limited number of toll roads in the area, there still exists the potential for sensitivity to annually increasing toll rates, given uncertainty as to overall demand and perceived value of time savings.

Rate-Making Flexibility Available - Revenue Risk (Price): Stronger (Revised from Midrange)

NCTA has flexibility to increase toll rates without any additional legal or regulatory approvals. The expressway has a set annual rate increase schedule through 2035, with rates increasing somewhat above inflation. NCTA maintains the ability to increase rates above the schedule. However, given the expressway's short life to date, there is uncertainty as to whether support exists for additional rate increases above the expressway's pre-determined rate schedule, if needed.

Gross Pledge Supports Asset - Infrastructure Development and Renewal: Stronger

The existing expressway is in new condition with low maintenance needs expected over the intermediate term and the planned Complete 540 extension is expected to have minimal initial capital needs as a brand-new facility when completed in FY 2024. Capital expenditures will be required over time to keep the road viable and NCDOT pledges to cover the expressway's operating, maintenance and rehabilitation expenses should toll revenues be insufficient. An independent engineer is required to perform annual inspections, supporting asset preservation. The expressway has sufficient capacity to support NCTA's long-term traffic forecast.

Back-Loaded, Fixed-Rate Debt - Debt Structure: Midrange

NCTA's overall capital structure consists of fixed-rate amortizing debt with no refinance risk, though annual debt obligations escalate from 2019 to maximum annual debt service in 2049, including proposed Complete 540 debt. Rate covenants are adequate, requiring toll increases to meet forward-looking minimum DSCRs of 1.3x and 1.1x on senior and total subordinate debt, respectively. Existing structural reserves are sufficient with a reserve fund surety on the senior lien sized to five-year maximum annual debt service (MADS). The senior lien DSRF requirement on the series 2018 refunding bonds will be 50% of the lesser of (a) 10% of principal amount of the bonds, (b) MADS, or (c) 125% of the average annual principal and interest requirements with respect to the bonds.

Financial Profile

Continued strong growth on the existing expressway through ramp-up has led to senior-lien DSCR of 4.0x for FY 2018, or 1.7x on all debt including future debt. Fitch's rating case, which incorporates future debt, produces an average total DSCR of 1.6x over the forecast period from the first year of opening through 2055, with minimum and average LLCR's of 1.8x and 3.1x, respectively. It is Fitch's view that, while the profile is somewhat dependent on growth, there is sufficient coverage cushion and liquidity support from the NCDOT-backed O&M and R&R guarantees to offset slower-than-expected growth. Additional support for the project exists in the form of a \$25 million annual payment from the state of North Carolina, net of state appropriation bond debt service (rated AA- by Fitch).

PEER GROUP

Once stabilized, the expressway's closest peers would include similar stand-alone projects such as Colorado's E-470 Public Highway Authority (E-470; BBB+/Stable) and San Joaquin Hills Transportation Corridor Agency (SJHTCA; BBB/BBB-/Stable). Triangle Expressway and its peers are all considered to be congestion reliever roadways in strong corridors that face competition from non-tolled alternate routes. The existing expressway's ETC tolls, at a moderate \$0.19/mile for passenger cars, are more favorable than those of its peers, ranging from \$0.30-\$0.45/mile; however, the peers have greater franchise strength as they have substantially longer operating history. The expressway's leverage remains elevated at almost 13x in year five of Fitch's rating case post-opening, but its improved forecast DSCR is more in line with E-470, averaging 1.4x over a 10-year period post ramp-up.

RATING SENSITIVITIES

Future Developments That May, Individually or Collectively, Lead to Positive Rating Action:

- Considering the potential for additional leverage, maintenance of solid financial metrics with total DSCR of at least 1.6x in Fitch's rating case for a sustained period;
- Continued NCDOT support and maintenance of the gross revenue pledge for any future financings;
- A track record of low demonstrated elasticity of demand with respect to rate increases.

Future Developments That May, Individually or Collectively, Lead to Negative Rating Action:

- An unexpected negative shift in operating performance or aggressively-structured additional leveraging resulting in rating case total DSCR of less than 1.4x for a prolonged period;

- Reluctance by the authority to increase toll rates above the approved rate schedule as needed;
- Reduced support for the expressway by the State of North Carolina.

TRANSACTION SUMMARY

NCTA is issuing approximately \$405 million in series 2018 senior lien revenue bonds to refund the existing Triangle Expressway TIFIA loan. The debt is fixed rate and fully amortizing with final maturity in 2041.

Performance Update

Traffic and revenue performance on the existing Triangle Expressway continues to be very strong through the ramp-up period. Robust revenue growth is driven by a higher percentage of video tolling than initially expected, the toll rate of which is approximately 50% higher than electronic tolling. FY 2018 toll transactions were up approximately 7.8% yoy to approximately 51 million. FY 2018 toll revenues were up approximately 11.2% yoy to approximately \$49 million.

The Complete 540 project will consist of the design and construction of an approximately 17.1 mile new toll-road facility consisting of six toll lanes from NC 55 Bypass to US 401, which will be known as Segment 1, and from US 401 to the I-40/US 70 interchange, which will be known as Segment 2. The construction of the two segments is referred to as Phase 1 of Complete 540. Phase 2, which would complete the 540 outer loop, is not assumed in Fitch's analysis. Construction of Phase 1 is divided into two segments - Segments 1 and 2. Segments 1 and 2 are further divided into 3 construction groupings, which will have separate DB Contractors and contracts. Phase 1 is expected to begin construction in 2019 and be open to traffic on January 1, 2024. NCTA intends to finance a portion of Complete 540 through the issuance of additional senior bonds and TIFIA loans.

The Complete 540 project has a construction completion guarantee from NCDOT. The construction completion assurance agreement mitigates cost overruns in the event construction costs exceed those specified in the design-build contract. The obligation of NCDOT in regards to renewal payments and construction cost overruns is to be funded from amounts available in the State Highway Fund or the State Highway Trust Fund. Each such payment is subject to appropriation by the State and the availability of amounts in such fund.

Fitch Cases

The forecast in the Fitch Base and Rating Case was developed by applying annual growth rates to historical Triangle Expressway FY 2018 revenue, along with assumptions outlined below in regards to the new Complete 540 segment. The base and rating case both assume the annual revenue growth rates for the Triangle Expressway component as assumed in the previous NCTA surveillance review.

Fitch's base case assumes sponsor traffic and revenue assumptions for Complete 540, as prepared by CDM Smith, but assumes a six-month construction delay, a lower annual inflation rate of 2.0%, and an annualization factor of 280 applied to the transaction and revenue impacts of Complete 540. Gross toll revenues increase at a compound annual growth rate (CAGR) of 3.8% from 2028 (post ramp-up) through 2049. 10-year DSCR (post ramp-up) averages 1.7x, while coverage through the life of the debt (2018-2055) averages 1.8x. Given the project debt's back loaded nature and the accreting principal amount of the Capital Appreciation Bonds, leverage is initially high and averages 8.6x for the first 10 years after ramp-up.

Fitch made a number of adjustments from the sponsor's traffic and revenue forecast in developing the Fitch Rating Case. The rating case assumes a 12-month construction delay and an extended

ramp-up period of four years under the rating case (three-year ramp-up in sponsor case). Increased revenue leakage rates are applied to the first five years of Bill-by-Mail (BBM) revenue associated with Complete 540. Fitch also assumes a 10% decrease in value of time (VOT) applied to/from zones in the Complete 540 Phase 1 corridor and a 50% reduction of induced demand on Triangle Expressway. Additional assumptions include annual inflation rate of 2.0% throughout the forecast period and an annualization factor of 280 applied to transaction and revenue associated with Complete 540. Gross toll revenues increase at a CAGR of 3.6% from 2029 (post ramp-up) through 2049. 10-year DSCR (post ramp-up) averages 1.4x, while coverage through the life of the debt averages 1.6x. Leverage remains elevated and averages 9.2x for the first 10 years after ramp-up.

Asset Description

Triangle Expressway, North Carolina's first modern toll road, is an 18.8-mile all-electronic toll road that comprises the partially complete outer loop around the greater Raleigh area from I-40 in the north to the NC-55 Bypass in the south. The expressway is formally located in Wake and Durham counties and extends south from the NC-147/Interstate 40 interchange in Research Triangle Park to Northern Wake Expressway, and then northeast to the Northern Wake Expressway (NC-540)/NC-54 interchange and to the south to the NC-55 Bypass in Holly Springs.

The Complete 540 Southeast Extension is a proposed greenfield project that will extend the existing and operating Triangle Expressway at its current southern terminus near Holly Springs by approximately 17.1 miles to a junction with I-40 south of Raleigh. Phase 1 of the project would substantially complete the 540 outer loop around Raleigh up to the I-40/US 70 interchange and would also link the towns of Apex, Cary, Clayton, Garner, Fuquay-Varina, Holly Springs, Knightdale and Raleigh. In addition to connecting these towns and cities, the project is also anticipated to ease congestion on area roadways, including I-440, I-40, N.C. 42, N.C. 55 and Ten-Ten Road. Construction is scheduled to begin in 2019, with the facility expected to open to traffic in 2024.

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Applicable Criteria

Rating Criteria for Infrastructure and Project Finance (pub. 27 Jul 2018)

<https://www.fitchratings.com/site/re/10038532>

Toll Roads, Bridges and Tunnels Rating Criteria (pub. 30 Jul 2018)

<https://www.fitchratings.com/site/re/10038900>

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